

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER OF PATENTS AND TRADEMARKS

Washington, D.C. 20231 www.uspto.gov

DATE MAILED: 09/11/2002

ATTORNEY DOCKET NO. CONFIRMATION NO. FIRST NAMED INVENTOR FILING DATE APPLICATION NO. 4355 10018052-1 Jeffrey T. Haselby 09/940,399 08/27/2001 09/11/2002 22879 7590 HEWLETT PACKARD COMPANY **EXAMINER** P O BOX 272400, 3404 E. HARMONY ROAD WALKENHORST, DAVID W INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400 PAPER NUMBER ART UNIT 2831

Please find below and/or attached an Office communication concerning this application or proceeding.

| • | | Application No. | Applicant(s) | |
|---|--|-------------------------|--|--|
| Office Action Summary | | 09/940,399 | HASELBY ET AL. | |
| | | Examiner | Art Unit | |
| | | W. David Walkenhorst | 2831 | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1 704(b). Status | | | | |
| 1)[| 1) Responsive to communication(s) filed on 27 August 2001. | | | |
| 2a) 🗌 | This action is FINAL . 2b)⊠ Th | is action is non-final. | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | |
| Dispositi | on of Claims | | | |
| 4)⊡ | Claim(s) 1-20 is/are pending in the application. | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | |
| 5) | Claim(s) is/are allowed. | | | |
| 6)[• | Claim(s) <u>1-20</u> is/are rejected. | | | |
| 7) | 7) Claim(s) is/are objected to. | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | |
| Application Papers | | | | |
| 9) The specification is objected to by the Examiner. | | | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner. | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | |
| a) All b) Some * c) None of: | | | | |
| | 1. Certified copies of the priority documents have been received. | | | |
| | 2. Certified copies of the priority documents have been received in Application No | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | |
| a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. | | | | |
| Attachment(s) | | | | |
| 2) Notic | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2</u> | 5) Notice of Informal F | (PTO-413) Paper No(s) Patent Application (PTO-152) | |
| | | | | |

Application/Control Number: 09/940,399 Page 2

Art Unit: 2831

DETAILED ACTION

Claim Objections

1. Claims 2, 5, 7 and 11 are objected to because of the following informalities: In claim 2, line 2, delete "being". In claim 5, line 5, insert --the-- before "first", and insert --be-- after "to". In claim 7, line 2, insert --an-- before "outer". In claim 11, line 2, delete the extra period. Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 4. Claims 1-2 and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Doeselaar et al. (US 5,717,576) in view of Kirma (US 5,126,507).

Art Unit: 2831

Regarding claim 1, Van Doeselaar et al. discloses a housing (32) that reduces electromagnetic interference; an opening (for connector 66) in the housing to allow one or more cables to pass therethrough; and a flexible cable shield (64) formed as a conduit and having a first and a second end, the flexible cable shield having an inner surface formed on an electrically conductive flexible material that reduces electromagnetic interference, the first end being secured to the enclosure and enclosing the opening (see Figure 2a), but does not disclose the second end being adjustably closable to closely surround one or more cables passing therethrough causing the inner surface of the flexible cable shield to contact the one or more cables. Kirma teaches an adjustably closable conduit that closely surrounds one or more cables passing therethrough causing the inner surface of the conduit to contact one or more cables (see col. 4, lines 26-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a second end being adjustably closable to closely surround one or more cables passing therethrough causing the inner surface of the flexible cable shield to contact the one or more cables for the purpose of sealing the cables and the interior of the housing from EMI and environmental contaminants.

Regarding claim 2, Van Doeselaar et al. as modified by Kirma above discloses all of the limitations of claim 1, and further discloses that the housing includes at least one wall of an electrically conductive material (see Van Doeselaar et al. col. 3, lines 38-40).

Regarding claim 5, Van Doeselaar et al. as modified by Kirma above discloses all of the limitations of claim 1, and further discloses a gasket (44 of Van Doeselaar) positioned around the opening and in contact with the first end of a flexible cable shield;

Art Unit: 2831

and a bracket (76 of Kirma) positioned against the gasket and being secured to the housing causing the gasket and the first end of the flexible cable shield to be compressed against the housing.

Regarding claim 6, Van Doeselaar et al. as modified by Kirma above discloses all of the limitations of claims 1 and 5, but does not disclose that the first end of the flexible cable shield is folded over the gasket. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the first end of the flexible cable shield folded over the gasket for the purpose of creating a tighter seal, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japiske*, 86 USPQ 70.

Regarding claim 7, Van Doeselaar et al. as modified by Kirma above discloses all of the limitations of claim 1, and further discloses that the housing includes an inner side and an outer side, but does not disclose that the first end of the flexible cable shield is secured to the inner side and the second end of the flexible cable shield being disposed on the outer side. It would have been obvious to one of ordinary skill in the art at the time the invention was made to secure the first end of the flexible cable shield to the inner side and disposing the second end of the flexible cable shield on the outer side for the purpose of providing more secure attachment of the cable shield to the housing, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japiske*, 86 USPQ 70.

Art Unit: 2831

Regarding claim 8, Van Doeselaar et al. as modified by Kirma above discloses all of the limitations of claim 1, and further discloses one or more straps (75 of Kirma) for cinching the second end of the flexible cable shield.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Doeselaar et al. (US 5,717,576) and Kirma (US 5,126,507) as applied to claim 1 above, and further in view of Dubrow et al. (US 4,900,877).

Regarding claim 3, Van Doeselaar et al. as modified by Kirma above discloses all of the limitations of claim 1, but does not disclose that the electrically conductive flexible material is a metallized fabric. Dubrow et al. teaches the use of a metallized fabric in col. 3, lines 52-60). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a metallized fabric for at least one wall of the housing, since a metallized fabric would provide EMI shielding and yet would allow ventilation of the housing.

6. Claims 4, 9 and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Doeselaar et al. (US 5,717,576) and Kirma (US 5,126,507) in view of Prysner (US 6,225,565 B1).

Regarding claim 4, Van Doeselaar et al. as modified by Kirma and Dubrow et al. above discloses all of the limitations of claim 1, but does not disclose that the flexible cable shield includes an outer surface bonded to the inner surface to support the inner surface. Prysner teaches that a flexible cable shield that includes an outer surface bonded to the inner surface to support the inner surface (see col. 4, lines 36-37 and Figure 2). It would have been obvious to one of ordinary skill in the art at the time the

Art Unit: 2831

invention was made to include an outer surface bonded to the inner surface to support the inner surface for the purpose of strengthening the flexible cable shield, thereby providing greater protection for the cables.

Regarding claim 9, Van Doeselaar et al. discloses one or more walls configured to enclose an electronic device, the one or more walls being electrically conductive to shield electromagnetic interference (32, see col. 3, lines 38-40); a cable opening (for connector 66) formed through one wall of the one or more walls to allow one or more cables to pass through; a cable conduit (64) having a first and second end and an inner and outer surface, the first end being secured to the one wall and enclosing the cable opening, the inner surface being formed of a flexible electrically conductive material, but does not disclose that the outer surface is formed of a flexible electrically nonconductive material, the inner and outer surfaces causing the cable conduit to be resilient where the second end is adjustable to a plurality of sizes to closely surround one or more cables minimizing electromagnetic interference. Prysner teaches that the outer surface is formed of a flexible electrically non-conductive material (see col. 3, lines 45-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the outer surface of a flexible electrically non-conductive material for the purpose of providing protection for the conductive shield. Kirma teaches that the inner and outer surfaces cause the cable conduit to be resilient where the second end is adjustable to a plurality of sizes to closely surround one or more cables minimizing electromagnetic interference (see col. 4, lines 26-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a

Art Unit: 2831

second end being adjustable to a plurality of sizes to closely surround one or more cables minimizing electromagnetic interference, causing the inner surface of the flexible cable shield to contact the one or more cables for the purpose of sealing the cables and the interior of the housing from EMI and environmental contaminants.

Regarding claim 11, Van Doeselaar et al. as modified by Kirma and Prysner above discloses all of the limitations of claim 9, and further discloses that the cable conduit is flexibly closeable at a plurality of points along its length (see Van Doeselaar col. 3, lines 48-52).

Regarding claims 12 and 13, Van Doeselaar et al. as modified by Kirma and Prysner above discloses all of the limitations of claim 9, and further discloses that the first end of the cable conduit includes one or more flaps that are secured to the one wall of the enclosure, and a gasket disposed against the one or more flaps and being compressed against the wall to minimize openings (see Van Doeselaar col. 3, lines 38-54).

Regarding claim 14, Van Doeselaar et al. as modified by Kirma and Prysner above discloses all of the limitations of claim 9, and further discloses that the one wall includes two panels and where the first end of the cable conduit is secured between the two panels (see Van Doeselaar col. 3, lines 38-54).

Regarding claim 15, Van Doeselaar et al. as modified by Kirma and Prysner above discloses all of the limitations of claims 9 and 14, and further discloses a bracket surrounding the first end of the cable conduit and being attached to both of the two

Art Unit: 2831

panels, the bracket securing the first end to one of the two panels (see Kirma col. 4, lines 25-35).

Regarding claim 16, Van Doeselaar et al. as modified by Kirma and Prysner above discloses all of the limitations of claim 9, and further discloses that the inner surface of the cable conduit is bonded to the outer surface (see Prysner col. 4, lines 54-67, and col. 5, lines 1-11).

7. Claims 17, 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Doeselaar et al. (US 5,717,576) in view of Dubrow et al. (US 4,900,877) and Prysner (US 6,225,565 B1).

Regarding claim 17, Van Doeselaar discloses an electrically conductive housing (32); a cable opening (for connector 66) formed in the housing to allow one or more cables to pass through; a cable conduit (64) enclosing the cable opening and extending out therefrom, the cable conduit being formed of a flexible and resilient material and having and open end and a securing end, one or more flaps formed at the securing end of the cable conduit, the one or more flaps being secured the housing to minimize openings therebetween, and the one or more flaps being positioned on the housings to surround the cable opening and the cable conduit being resiliently openable and closeable to configure the open end of the cable conduit to a plurality of sizes and closely surround and contact one or more cables passing therethrough (see Van Doeselarr Figure 2a and 2b). Van Doeselaar does not disclose an inner surface layer formed in the cable conduit being an electrically conductive fabric to reduce electromagnetic interference; an outer surface layer formed in the cable conduit being

Art Unit: 2831

an electrically non-conductive material that is resilient. Dubrow et al. teaches the use of a metallized conductive fabric in col. 3, lines 52-60). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a metallized conductive fabric for at least one wall of the housing, since a metallized conductive fabric would provide EMI shielding and yet would allow ventilation of the housing. Prysner teaches that the outer surface is formed of a flexible electrically non-conductive material (see col. 3, lines 45-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the outer surface of a flexible electrically non-conductive material for the purpose of providing protection for the conductive shield.

Regarding claim 18, Van Doeselaar as modified by Dubrow et al. and Prysner above discloses all of the limitations of claim 17, but does not specifically disclose that an electrically conductive fabric is metallized nylon. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use metallized nylon for the conductive fabric, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Regarding claim 20, Van Doeselaar as modified by Dubrow et al. and Prysner above discloses all of the limitations of claim 17, and further discloses that the cable conduit is flexibly closeable at a plurality of points along its length (see Van Doeselaar col. 3, lines 48-52).

Art Unit: 2831

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Doeselaar et al. (US 5,717,576) in view of Kirma (US 5,126,507), Prysner (US 6,225,565 B1) and Dubrow et al. (US 4,900,877).

Regarding claim 10, Van Doeselaar et al. as modified by Kirma and Prysner above discloses all of the limitations of claim 9, and further discloses that the flexible electrically non-conductive material is a resilient cellular structured material (see Prysner Figure 2). The modified Van Doeselaar does not disclose that the flexible electrically conductive material is a metallized fabric. Dubrow et al. teaches the use of a metallized fabric in col. 3, lines 52-60). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a metallized fabric for at least one wall of the housing, since a metallized fabric would provide EMI shielding and yet would allow ventilation of the housing.

9. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Doeselaar et al. (US 5,717,576) in view of Dubrow et al. (US 4,900,877), Prysner (US 6,225,565 B1) and Kirma (US 5,126,507).

Regarding claim 19, Van Doeselaar as modified by Dubrow et al. and Prysner above discloses all of the limitations of claim 17, but does not disclose an electrically conductive bracket positioned against the one or more flaps and being secured to the housing to compress the one or more flaps against the housing. Kirma teaches an electrically conductive bracket (76) positioned against the one or more flaps and being secured to the housing to compress the one or more flaps against the housing (see

Art Unit: 2831

Kirma col. 4, lines 25-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an electrically conductive bracket (76) positioned against the one or more flaps and being secured to the housing to compress the one or more flaps against the housing in view of the teaching of Kirma for the purpose of sealing the cables and the interior of the housing from EMI and environmental contaminants.

Conclusion

- 10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kopp et al., Plummer, III et al., Leyland, Kaplo, Tahmassebpur, and Courtney et al are cited to show EMI shielded housings and EMI shielding gaskets similar to those in applicant's claimed invention.
- 11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to W. David Walkenhorst whose telephone number is (703) 306-5402. The examiner can normally be reached on M, Tu, Th, F 8:00AM-5:30PM, and alternate Weds.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (703) 308-0956. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-1341 for regular communications and (703) 305-1341 for After Final communications.

Art Unit: 2831

Page 12

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Walkenhorst:wdw September 9, 2002 COON A. REICHARD

SUPERVISORY PASSINT EXAMINER

FEGINOLOGY GENTER 2500